

11
CLAIMS

What is claimed is:

- 5 1. In a device attached to a network, a method for controlling distribution of data from the device to another device via the network, the method comprising the steps of:
- receiving a digital signal representative of program content, the digital signal having an authorization field indicative of a first transport mode authorizing distribution of the digital signal outside the network, and of a second transport mode inhibiting distribution of the
- 10 digital signal outside the network;
- determining whether a destination device to which the digital signal is to be distributed is outside the network;
- determining whether the authorization field is indicative of the first or second transport mode; and
- 15 inhibiting transmission of the digital signal in response to determining that the authorization field is indicative of the second transport mode and the destination device is outside the network, otherwise, transmitting the digital signal to the destination device.
2. The method of claim 1, wherein the first determining step comprises the steps of:
- 20 receiving location information of a router on the network that is used for routing data to devices outside the network;
- receiving destination data indicative of location information associated with a destination device to which the program content is to be distributed; and
- determining whether the destination device is outside the network by determining
- 25 whether the destination data corresponds to the location information of the router.
3. The method of claim 2, wherein the digital signal comprises transport stream packets.
4. The method of claim 3, wherein for each transport stream packet, a payload portion is
- 30 examined to determine whether the authorization field associated with that packet indicates whether the content is authorized for transmission outside the network when the destination device is outside the network, and wherein the inhibiting step comprises discarding the packet in response to the determination.

5. The method of claim 4, wherein the step of receiving location information of the router comprises receiving a physical address of the router and storing the address in memory.

6. The method of claim 5, wherein the step of receiving destination data comprises receiving a physical address of a device on the network in response to a broadcast ARP request from the device.

7. The method of claim 6, wherein the first determining step comprises comparing the received physical address of the device on the network with the physical address of the router.

8. The method of claim 1, wherein the device is an access device, and the method further comprises the step of accessing the digital signal from a broadcast source.

9. The method of claim 1, wherein the digital signal comprises an MPEG-2 transport stream.

10. The method of claim 9, wherein the authorization field is included in the PMT.

11. A device coupled to a network and adapted to distribute data to other devices connected to the network, the device comprising:

means for receiving a digital signal representing program content, the digital signal including an authorization field indicative of a first transport mode wherein distribution of the digital signal outside of the network is authorized, and of a second transport mode wherein distribution of the digital signal outside of the network is inhibited;

memory encoded with computer code for executing a send operation for transmitting data on the network;

a processor for controlling data receiving and transmitting operations of the device, the processor including data storage means for storing address information of devices connected to the network; and

data interface means, coupled to the network, for receiving data from devices attached to the network, and for distributing the digital signals on the network, wherein the processor inhibits transmission of the digital signal on the network in response to a determination that the device is outside the network and that the authorization field is indicative of the second

transport mode, otherwise, the processor enables transmission of the digital signal on the network.

12. The device according to claim 11, wherein the data interface means is adapted to receive address information associated with a router attached to the network that is used to routing data to devices outside the network and to receive address information associated with the destination device, and the processor determines whether the destination device is outside the network by comparing the address information of the router and the addressing information of the destination device.

13. The device of claim 11, wherein the computer code comprises:

computer program code for formatting an IP packet containing content to be distributed to a destination device;

computer program code for comparing a physical address of the destination device with a physical address associated with the router on the network to determine whether the destination device is outside the network; and

computer program code for inhibiting transmission of packet data in response to a determination that the authorization field is in the second transport mode and the destination device is outside the network.

14. The device of claim 11, wherein the digital signal comprises an MPEG-2 open data stream.

15. The device of claim 14, wherein the authorization field is included in the PMT.

16. The device of claim 11, wherein the device comprises an access device and the receiving means comprises means for receiving the digital signal from a broadcast source.

17. The device of claim 16, further comprising means for authenticating the destination device using an authentication protocol.

18. The device of claim 17, wherein interface means discards the data packets in response to the determination of the second transport mode and the destination device being outside the network.